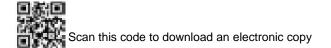
# If in doubt contact your local OATA retail member for further information



#### IMPORTANT THINGS TO REMEMBER:

<u>ALWAYS PURCHASE</u> test kits and regularly check the water for ammonia, nitrite, nitrate and pH. This will allow you to ensure that the water in your aquarium is not causing welfare problems for your fish.

**ESTABLISH A ROUTINE** for testing the water in your aquarium. Record your results to enable you to highlight fluctuations quickly. Also check the temperature of the water.

**MAINTAIN** the water in the aquarium within the accepted parameters highlighted in this leaflet. You may need to undertake regular water changes to achieve this.

<u>ALWAYS</u> wash your hands, making sure to rinse off all soap residues, before putting them into your aquarium. Wash them again afterwards and certainly before eating, drinking or smoking.

**NEVER** siphon by mouth. A fish tank can harbour bacteria which can be harmful if swallowed. Purchase a specially designed aquarium gravel cleaner which can be started without the need to place the siphon in your mouth.

# NEVER RELEASE YOUR AQUARIUM ANIMALS OR PLANTS INTO THE WILD.

Never release an animal or plant bought for a home aquarium into the wild. It is illegal and for most fish species this will lead to an untimely and possibly lingering death as they are not native to this country. Any animals or plants that do survive might be harmful to the environment.

#### Checklist...

#### **Equipment:**

□ Aquarium

Gravel cleaner

- $\Box$  Water testing kit
- $\Box$  Marine salt
- $\hfill\square$  Marine substrate and live rock
- $\hfill\square$  Reverse Osmosis , deionised water or tap water conditioner
- □ Heater, thermometer and hydrometer
- $\hfill \Box$  Filter and protein skimmer
- Before purchase ensure that:
- □ The aquarium is large enough to house an adult.
- □ Water parameters are as advised.
- □ The fish is compatible with existing set-up.



#### ORNAMENTAL AQUATIC TRADE ASSOCIATION LTD

"The voice of the ornamental fish industry"

www.ornamentalfish.org











# Angelfish

V1.3

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**TROPICAL MARINE FISH** 

### Introduction...

This group of marine fish are brightly coloured and much larger than the dwarf angelfish. There are two genera which are commonly found in the aquarium trade, *Pomacanthus* and *Holocanthus*.

In the wild these fish can be found in the Western Atlantic (*Holocanthus*) and the western Indo-Pacific (*Pomocanthus*).

### Water requirements...

These fish do not tolerate any ammonia or nitrites in the aquarium, therefore they should be added to a well established aquarium. The water parameters are recommended to be within the following, although these fish may acclimatise to different water over time:

Temperature: 23-28°C

<u>pH</u>: 8.0-8.4

<u>Ammonia</u>: 0mg/l (0.01mg/l may be tolerated for short periods) <u>Nitrite</u>: 0mg/l (0.125mg/l may be tolerated for short periods) <u>S.G.</u> 1.020-1.025 at 22-28°C

## Biology...

This group of fish are not recommended for beginners due to some difficulties in acclimatising them to the aquarium environment. They grow very large when mature and therefore require large tanks to thrive.

#### Maximum body length: 35-50cm (adult)

Many of this group of fish show juvenile colourations and patterns different to the adult form. Transformation between these depends upon species but often occurs when the fish reach between 8-15cm.

All Angelfish are hermaphrodites and there is no colour or size differentiation between males and females. In the wild pairs may be seen swimming together.

There are reports of these fish living up to 15 years, and this could be possible in an aquarium with good water quality and without ailments.

These fish have an aggressive nature, although this varies between species.

### Aquarium requirements...

Due to the potential size of these fish, they require very large tanks. It is recommended that a minimum of 150 gallons (680 litres) is needed for adults. It is not good practice to purchase a juvenile Angelfish for a smaller aquarium without being prepared to upgrade the aquarium as they grow quickly.

The tank will require good filtration as these large fish can produce a lot of waste and will not tolerate ammonia or nitrites. A protein skimmer would therefore be beneficial.

A heater, thermometer, hydrometer and secure lid with lighting will also be needed. It is reported that some species are very sensitive to changes in pH, salinity and water quality therefore, a testing kit should also be purchased. A UV steriliser is also recommended.

A large base of live rock will also be beneficial to provide these fish with a natural environment.

#### Maintenance...

At least every two weeks, a partial water change of 25-30% is strongly recommended (a siphon device is also useful to remove waste from the gravel). This help to reduce the build-up of potentially harmful nitrates and other pollutants. Replacement water should be dechlorinated using strong aeration or a tap water conditioner (if not using reverse osmosis water). Ideally, replacement water should be heated and enough salt should be added to achieve the correct salinity.

Filters should be checked for clogging and blockages. If the filter needs cleaning, then do not wash it using tap water; any chlorine present may kill the beneficial bacteria that has established within the media. Instead, it can be rinsed in tank water which is removed during a partial water change. This should reduce the number of bacteria lost.

Good husbandry is essential as these fish can be stressed by even the smallest amounts of ammonia and nitrite. Test the water weekly to monitor ammonia, nitrite and nitrate, especially after initial set-up and after adding new fish. Don't forget to check the salinity as this may increase due to evaporation of water.

If live rock and invertebrates are present in the aquarium, never use copper based medications. Copper is highly toxic to invertebrate species, including those found within live rock.

## Feeding...

These fish are omnivores feeding upon a wide variety of foods in the wild including sponge, algae, bryozoans and tunicates.

Once in an aquarium they may take time to accept aquarium food, but once they do there shouldn't be any problems offering a wide range of diet including flake, frozen, freeze dried and live foods. These fish should be fed what they can eat within a few minutes 2-3 times a day. Remove any uneaten food to reduce waste build up.

# Common problems...

A water quality problem will affect fish behaviour and can be shown by clamped fins, reduced feeding, erratic swimming and gasping at the surface. Immediately test the water if any of these symptoms are shown.

If in doubt ask your retailer for advice.

# Compatibility...

These fish are not reef safe, they eat corals, polyps and sponges in the wild and will quickly destroy them in an enclosed aquarium. They will also show aggression towards small invertebrates and therefore are best kept in large fish only aquariums.

Some of the species will show aggression towards same species and others will not tolerate any other angelfish, ask your retailer for advice regarding your particular species.

An angelfish should be added to the aquarium last, as they can show extreme territorial behaviour towards any "new" fish added to the aquarium, which often results in death.

The less aggressive can co-habit peacefully with clownfish, wrasse, tangs and butterflies as long as the tank is large enough.

### Breeding...

These fish have not been successfully bred in home aquariums, partly to do with the aggression they can show towards each other and also due to the difficulty identifying sexes.

In the wild they scatter eggs across the reef . This helps to reduce the chances of interspecies competition between the juveniles.